

**FLORAE MALESIANAE PRECURSORES XL**  
**NOTES ON MALESIAN AND SOME**  
**EXTRA-MALESIAN CYPERACEAE IX<sup>1</sup>**

J. H. KERN

**Mapania monostachya** Uitt., Rec. Trav. Bot. Néerl. 32 (1935) 194.

BORNEO. Sarawak: Ulu Tubau, Bintulu, skeletal sandy clay soil on steep hillside by sandstone rocks, Nyabau formation, mixed Dipterocarp forest, c. 350 m., *Ashton S 18439* (L); base of Bt Naoung, Ulu Muput Kanan, Anap, sandstone rocks in shade, Biban formation, common, 600 m., Oct. 11, 1963, *Ashton S 19360* (L). West Borneo: Sanggau, am Ufer eines Bächleins, felsig, zwischen Baumwurzeln und Steinen, Juni 23, 1964, *A. Elsener 26* (L).

**Scirpus crassiusculus** (Hook. f.) Benth., Fl. Austr. 7 (1878) 326.

NEW GUINEA. Papua: Southern Highlands, upper western slopes of Mt Giluwe, mountain tarn in alpine grassland, 11,000 ft, Sept. 20, 1961, *Pullen 2877* (CANB); same locality, 10,200 ft, Aug. 9, 1961, *Schodde 1757* (CANB, L); same locality, 11,000 ft, local name *kasump* (Mendi language), *Schodde 1786* (CANB, L); above Klareg, bog grasslands, 8800 ft, local name *iwarud* (Mendi language), Aug. 30, 1961, *Schodde 2052* (CANB, L).

**Eleocharis sphacelata** R. Br. For the synonymy see S.T. Blake, Proc. Roy. Soc. Queensl. 50 (1939) 102.

NEW GUINEA. Territory of New Guinea, Western Highlands District, Wabag Subdist.: northern slopes of Sugarloaf complex, along Wapu River, in swamp surrounded by treefern grasslands, alt. 9500 ft; local name *kur* (Enga language, Poio), *Hoogland & Schodde 7030* (CANB); Kandep valley, 20 miles S. of Laiagam, swamp, alt. 7500 ft, *Robbins 3242* (CANB).

New for New Guinea; known from Australia (not in the Western part), Tasmania, and New Zealand (North Island). *Eleocharis sphacelata* is very closely allied to the widely spread *E. dulcis* (Burm. f.) Henschel, and might perhaps better be treated as a subspecies of this polymorphic species. It is characterised by its stout horizontal rhizome without tuber-bearing stolons, broader spikelets, longer glumes, and slightly larger nuts. Its stems are always stout, but equally stout stems occasionally occur in *E. dulcis*.

**Eleocharis brevicollis** Kern, *sp. nov.* — Ser. *Palustriformes*, subser. *Palustres* Svenson. — Fig. 1.

Herba perennis, rhizomate lignoso, elongato, repente, 2—3 mm (apice c. 1 mm) crasso. Culmi erecti, fasciculati, tenues, subteretes, costulati, laeves, pallide virides, (30—) 60—90 cm alti, 1—2 mm crassi. Vaginae herbaceae, superne leviter ampliatae, basi atropurpureae, nitidae; vagina superior apice scariosa, ore oblique secta, haud mucronata, usque ad 20 cm longa. Spicula erecta, cylindrica, densiflora, obtusa, pallide brunnea,

<sup>1</sup> Part I in Reinwardtia 2, 1952, 97—130; II in Reinwardtia 3, 1954, 27—66; III in Blumea 8, 1955, 110—169; IV in Reinwardtia 4, 1956, 86—97; V in Blumea 9, 1958, 215—236; VI in Blumea Suppl. 4, 1958, 163—169; VII in Acta Botanica Neerlandica 7, 1958, 786—800; VIII in Blumea 10, 1960, 635—651.

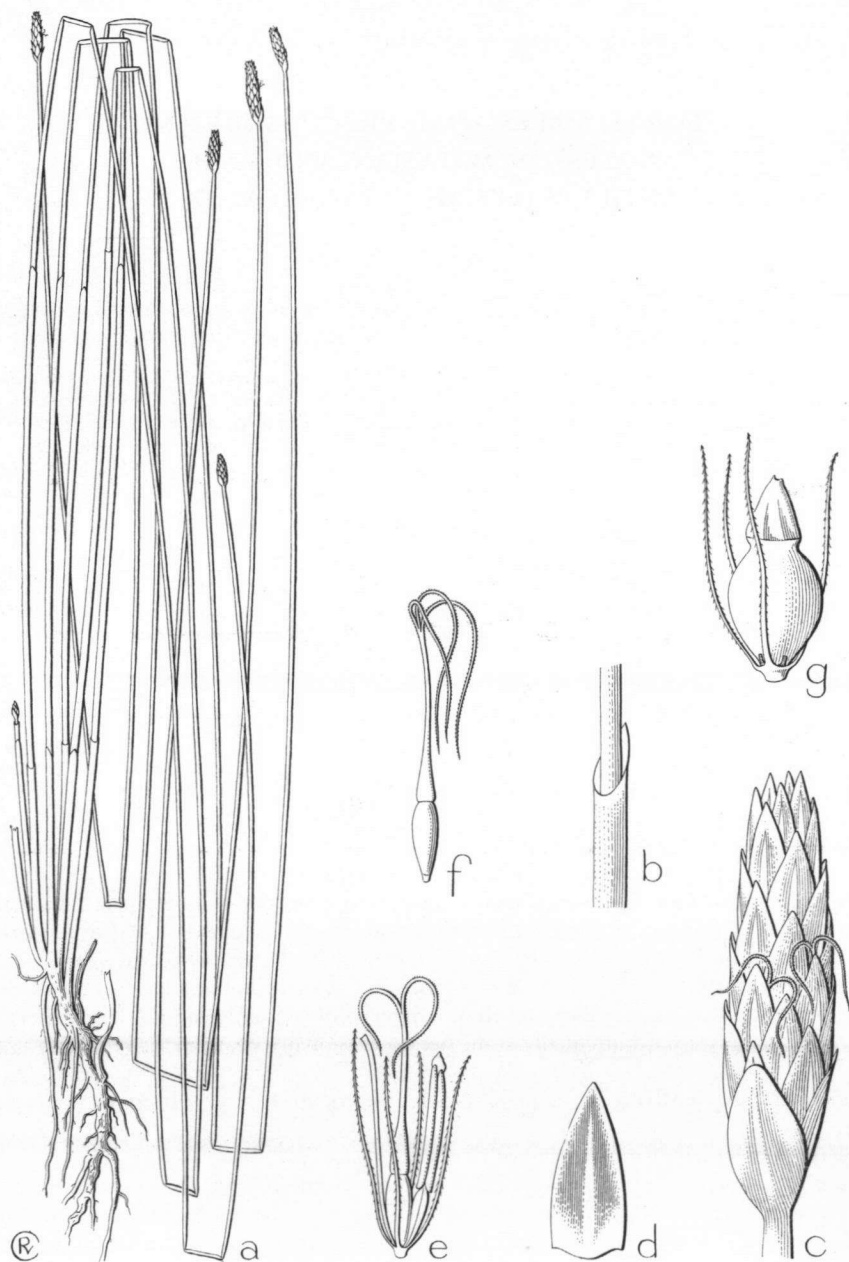


Fig. 1. *Eleocharis brevicollis* Kern — a. Habit ( $\times \frac{1}{2}$ ); b. mouth of leaf-sheath ( $\times 5$ ); c. spikelet ( $\times 5$ ); d. glume ( $\times 5$ ); e. digynous flower ( $\times 10$ ); f. trigynous flower ( $\times 10$ ); g. nut ( $\times 10$ ) (from Walker ANU 675).

12—18 mm longa, c. 3 mm crassa. *Glumae* adpressae, tenuiter membranaceae, concavae, ecarinatae, oblongo-ovatae, acutiusculae, uninerviae, stria mediana angusta viridi excepta pallide brunneae, marginibus late albo-hyalinae, intus marginibus purpureo-zonatae, c.  $4\frac{1}{2}$  mm longae, 2 mm latae; gluma infima sterilis firmior, obtusa, spiculum amplectens. *Setae hypogynae* (3—)4, firmiae, pallidae, retrorsim scabrae, nuce distincte longiores, stylopodium subaequantes vel paullo superantes. *Stamina* (2—)3; antherae lineares, c. 2 mm longae, connectivo in appendicem ovatam acuminatam producto. *Stylus* bifidus, rarius trifidus, stigmatibus quam stylus proprius brevioribus. *Stylopodium* persistens triangulare, applanatum, celluloso-spongiosum, stramineum, c.  $\frac{3}{8}$  latitud. nucis latum, longitudine latitudinem aequante vel superante. *Nux* turgide biconvexa, elliptica, apice sub annulo constricta, marginibus haud costata, nitida, lutea vel pallide brunnea, utroque latere cellulis extimis subisodiametricis obsolete reticulata, c.  $1\frac{1}{2}$  mm longa  $1\frac{1}{2}$  mm lata.

NEW GUINEA. Territory of New Guinea: Western Highlands, Sirunki, swamp between Kaiamanda and Nanguris village, in mixed *Acorus* and sedge sward, water depth from 3—10 cm, rooting in fine detritus clay mud overlain by orange ooze, alt. 8400 ft, Sept. 12, 1962, Walker ANU 675 (CANB., type; L).

This is the first Malesian record of a member of Series *Palustriformes*, subseries *Palustres*, a group according to the monographer of the genus *Eleocharis*, Dr H. K. Svenson, presenting 'such baffling interrelationships and so few tenable characters' that the treatment of this New Guinea collection as a new species must necessarily be provisional. The species is mainly characterised by the dark purple leaf-sheaths, the very oblique mouth of the uppermost sheath, the pale brown obtuse spikelet, and the short but distinct neck of the nut.

***Fimbristylis trichoides* Kern, spec. nov. — Sect. *Fuscae* Ohwi. — Fig. 2.**

Herba annua, pergracilis, glabra, radicibus fibrosis. *Culmi* solitarii vel fasciculati, erecti, setacei, trigoni, lateribus sulcati, laeves, usque ad 12 cm alti,  $\frac{1}{2}$ — $\frac{1}{2}$  mm crassi, ad basin foliati. *Folia* culmo plerumque multo breviora, setacea, canaliculata, laevia, acutiuscula, eligulata, supra celluloso-reticulata, subtus tenuiter nervata, marginibus incrassata,  $\frac{1}{2}$ — $\frac{3}{8}$  mm lata; vaginae foliorum basium laxae, stramineae, marginibus late scariosae, eae foliorum caulinarum 1—2 tubulosae, ore oblique truncatae. *Inflorescentia* 1—3 (—4)-spiculata, usque ad 1 cm longa; radii, si adsunt, laeves, erecti, brevissimi, usque ad 6 mm longi. Bractee 2, brevissimae, glumis consimiles, vel bractea infima subfoliacea, recurvata, ad 7 mm longa. *Spiculae* erectae, lanceolatae, valde compressae, acutiusculae, pauciflorae, 4—5 mm longae, 1— $1\frac{1}{2}$  mm latae. Rhachilla late alata. *Glumae* distiche dispositae, tenuiter membranaceae, erectae, elliptico-ovatae, obtusiusculae, muticae, acute carinatae, glandulis rubro-brunneis dense puncticulatae, c.  $2\frac{1}{2}$  mm longae et 2 mm latae, nervo medio crasso infra apicem evanescente. *Stamina* 3; antherae oblongae,  $\frac{1}{2}$ — $\frac{3}{8}$  mm longae, connectivo in appendicem brevem hyalinam glabram producto. *Stylus* triqueter, basin versus bulboso-incrassatus, glaber,  $1\frac{1}{4}$ — $1\frac{1}{2}$  mm longus, stigmatibus 3 quam stylus paullo brevioribus. *Nux* trigona, angulis costata, obovoidea, breviter stipitata, vix umbonulata, pallide straminea,  $\frac{5}{8}$  mm longa,  $\frac{1}{2}$  mm lata, cellulis extimis minutis isodiametricis indistincte reticulata.

THAILAND. Khao Yai National Park, Khao Khieo, in open bog on sandstone, stagnant water, rather common and gregarious locally, 1300 m, August 29, 1963, Sleumer & Smitinand 8323a (distributed to BKF, BO, C, G, K; L, type; SING).

In *Fimbristylis* sect. *Fuscae* the glumes are glabrous, or short-hairy, or densely puncticulate by reddish glands. Those species in which they are gland-dotted may be distinguished as follows:

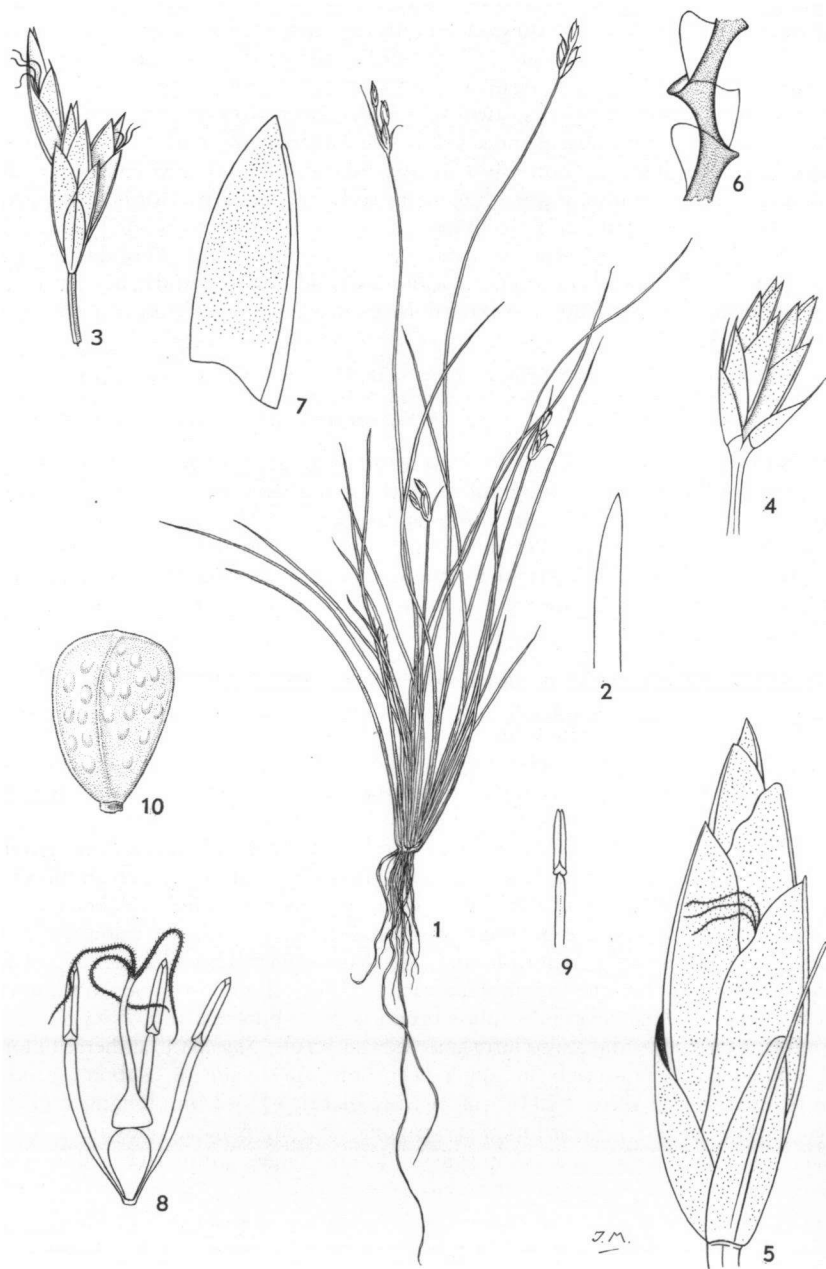


Fig. 2. *Fimbristylis trichoides* Kern — 1. Habit ( $\times 1$ ); 2. tip of leaf ( $\times 15$ ); 3 & 4. inflorescences ( $\times 5$ ); 5. spikelet ( $\times 15$ ); 6. part of rhachilla ( $\times 15$ ); 7. glume ( $\times 15$ ); 8. flower ( $\times 15$ ); 9. stamen ( $\times 15$ ); 10. nut ( $\times 30$ ) (from Smitinand & Sleumer 8323a).

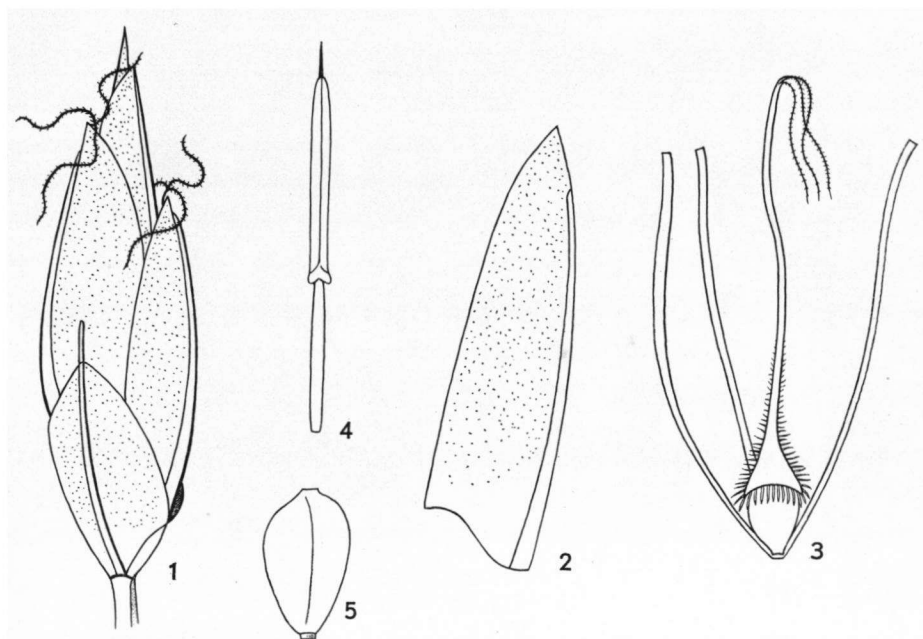


Fig. 3. *Fimbristylis fuscoides* C. B. Clarke — 1. Spikelet ( $\times 15$ ); 2. glume ( $\times 15$ ); 3. flower ( $\times 15$ ); 4. stamen ( $\times 15$ ); 5. nut ( $\times 30$ ) From W. Meijer SAN 19778 (L) N. Borneo, Dist. Papar, Kimanis For. Res., on coastal padang, Sept. 1959.

1. Nut transversely lineolate by the linear epidermal cells.
2. Perennial with short-creeping rhizome. Stems 25—50 cm tall. Glumes  $2\frac{3}{4}$ —4 mm long. Stamens 3; anthers 1—2 mm long. Style 3— $3\frac{1}{2}$  mm long, shortly hairy at the base. Nut obovoid to obovoid-ellipsoid,  $0.75$ — $0.9 \times 0.4$ — $0.7$  mm . . . . . *F. cinnamometorum* (Vahl) Kunth
2. Annual with fibrous roots. Stems 5—12 cm tall. Glumes  $1\frac{1}{4}$ —2 mm long. Stamen 1; anther  $\frac{1}{2}$  mm long. Style 1— $1\frac{1}{4}$  mm long, glabrous. Nut oblong-obovoid,  $0.6$ — $0.75 \times 0.25$ — $0.3$  mm  
*F. adenolepis* Kern
1. Nut indistinctly reticulate by the almost isodiametric cells. Stamens 3.
3. Inflorescence with 4—18 spikelets, 2—4 cm long. Nut smooth. Glumes 3— $3\frac{1}{2}$  mm long. Anthers 1—2 mm long. Style hairy at the base,  $2\frac{1}{4}$ — $3\frac{1}{2}$  mm long. Densely tufted perennial. Fig. 3.  
*F. fuscoides* C. B. Clarke
3. Inflorescence with 1—3(—4) spikelets, up to 1 cm long. Nut verruculose. Glumes  $2\frac{1}{2}$  mm long. Anthers  $\frac{1}{4}$ — $\frac{3}{8}$  mm long. Style glabrous,  $1\frac{1}{4}$ — $1\frac{1}{2}$  mm long. Annual with fibrous roots.  
*F. trichoides* Kern

### *Fimbristylis tenuinervia* Kern, Blumea 8 (1955) 137, f. 7.

NEW GUINEA. Territory of New Guinea, Sepik Dist.: Wewak-Angoram area, Wewak-Maprik road near Tonembi, grassland, road edge, Aug. 24, 1959, *Robbins 2256* (CANB); Yangore-Maprik Sth Road, near Hayfield, in grassland, Sept. 9, 1959, *Robbins 2398* (CANB).

### *Fimbristylis capilliculmis* Ohwi, Blumea 8 (1955) 99, f. 4.

NEW GUINEA. Territory of New Guinea: Morobe Dist., about 3 miles N. of Gurukor, open wet rock face by waterfall, 1500 ft, March 1, 1962, *Th. G. Hartley 9957* (CANB).

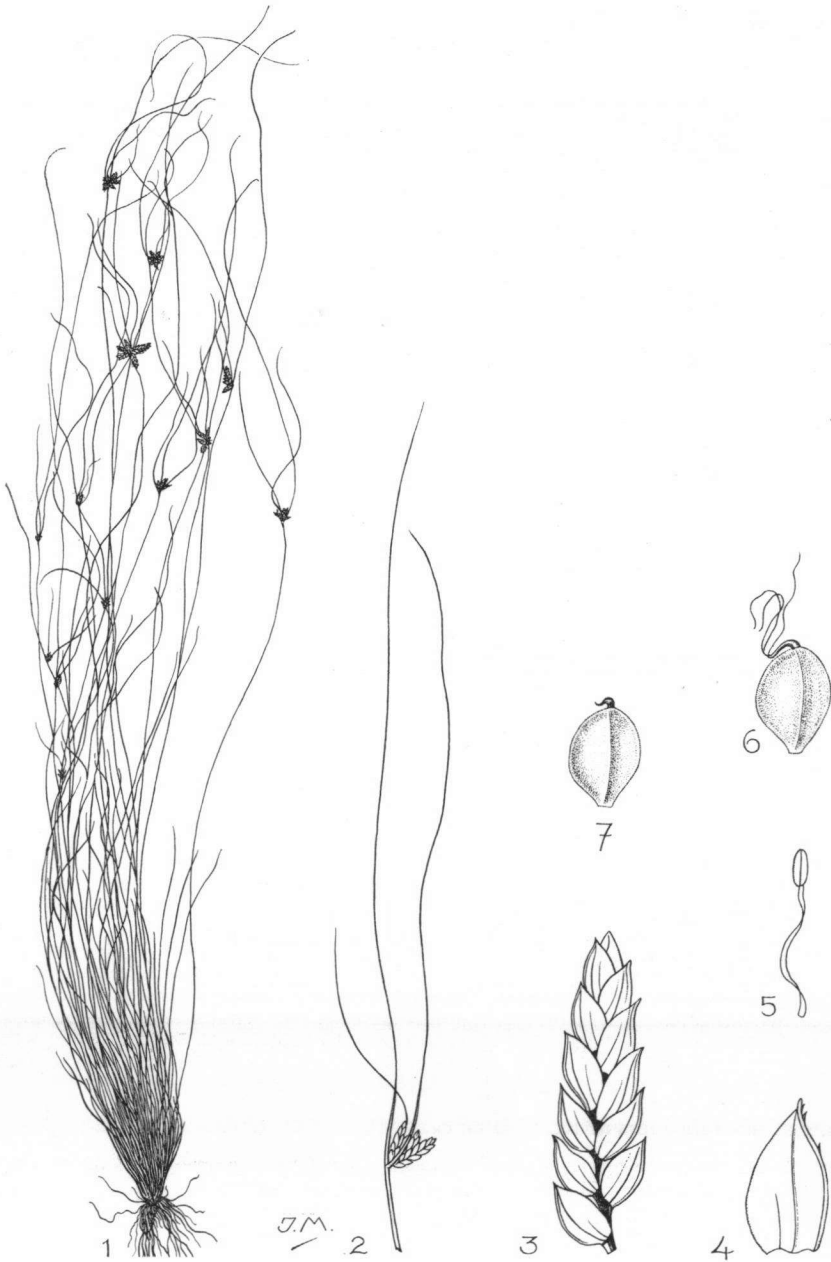


Fig. 4. *Cyperus curvistylis* Kern — 1. Habit ( $\times \frac{1}{2}$ ); 2. inflorescence ( $\times 1$ ); 3. spikelet ( $\times 7\frac{1}{2}$ ); 4. glume ( $\times 15$ ); 5. stamen ( $\times 15$ ); 6 & 7. nuts ( $\times 15$ ) (from R. W. Johnson 2638).

**Cyperus curvistyliis** Kern, *spec. nov.* — Sect. *Tenelli* C. B. Clarke. — Fig. 4.

Herba perennis, tenerrima, viridis, glabra, rhizomate brevissimo. Culmi dense caespitosi, pergraciles, setacei, erecti, 10—30 cm alti,  $\frac{1}{4}$  mm crassi, obsolete trigoni, uno latere sulcati, laeves, inferne paucifolii, basi vaginis elaminatis brunneis demum in fibras dissolutis plus minusve incrassati. Folia culmo breviora, perangusta, filiformia, acuta, canaliculata vel in sicco marginibus involuta, laeves vel apicem versus marginibus minute scabridula,  $\frac{1}{2}$ — $\frac{3}{4}$  mm lata, vaginis antice hyalino-membranaceis. Bractee 2—3, inflorescentiam longissime superantes, foliis similes, filiformes, basi haud dilatatae; bractea infima culmum quasi continuans, usque ad 12 cm longa. Spiculae 2—6 in apice culmi digitatim congestae, raro solitariae, patentes, lineari-oblongae, compressae, subacutae, usque ad 8 mm longae,  $1\frac{1}{2}$  mm latae, usque ad 16-florae. Rhachilla persistens, recta, anguste alulata. Glumae subdense dispositae, oblique erectae, membranaceae, late ovatae, obtusae, in mucronem perbreve rectum productae, pallidae, late acuteque viridicarinatae, carina apice scabridulae, utrinque 1—2-nervosae, margines versus enerviae,  $1\frac{1}{2}$  mm longae. Stamina 3, antheris oblongis  $\frac{1}{2}$  mm longis. Nux  $\frac{2}{3}$  glumae aequans, ellipsoidea vel subobovoidea, triquetra, angulis prominentibus, nitida, breviter lateque stipitata, brunnea, 1 mm longa,  $\frac{1}{2}$  mm lata. Stylus apice in stigmata 3 tenuia c. 1 mm longa partitus; parte basali valde recurvata  $\frac{1}{2}$  mm longa, cum nuce continua, persistente.

QUEENSLAND. Leichhardt District, site of Brigalow Research Station, 20 miles NW. of Theodore, in brigalow-bonewood scrub on brown loam, April 25, 1963, R. W. Johnson 2638 (L, type).

Closely related to *Cyperus gracilis* R. Br., but still slenderer than that species, with capillary stems and leaves, narrower spikelets, shorter 3—5-nerved glumes with very short, only  $\frac{1}{4}$  mm long, straight mucro, and ellipsoid, brown, acutely angled nuts crowned by the strongly recurved persistent style-base. In *C. gracilis* the spikelets are somewhat more than 2 mm wide, the glumes c. 2 mm long, strongly 7—9-nerved, with a distinct,  $\frac{1}{2}$  mm long, recurved mucro, and the nut turbinate, truncate or slightly depressed at the top, obtusely angled, blackish, and crowned by the much less recurved style-base.

In Kükenthal's *Cyperus* monograph (Pflanzenr. iv 20, Heft 101, 1936, 292) the section to which *C. gracilis* and its allies belong is called 'Sect. *Graciles* Benth., Fl. austral. vii (1878) 254', in S. T. Blake's treatment of the section (Proc. Roy. Soc. Queensl. 51, 1940, 36) 'Sect. *Graciles* C. B. Clarke'. However, Benthams name was not published as a sectional one, and Clarke used the name *Tenelli*, Kew Bull. add. ser. 8 (1908) 96.

It is questionable whether sect. *Tenelli* is sufficiently distinct from sect. *Haspani*.

**Cyperus pachycephalus** Kern, Reinw. 2 (1952) 119, f. 10.

NEW GUINEA. Territory of New Guinea: Sepik Dist., Wewak-Angoram area, Sepik River opposite Nemchan village, water edge of channel, Sept. 17, 1959, Robbins 2484 (CANB).

**Cyperus diaphanus** Schrad. ex R. & S. var. *setiformis* (Korsh.) Kern, *comb. nov.* — *C. setiformis* Korsh., Act. Hort. Petropol. 12 (1892) 405; Kük., Pfl. Reich, Heft 101 (1936) 393; Ohwi, Mem. Coll. Sc. Kyoto Imp. Univ. B 18 (1943) 158. — *Pycnus setiformis* (Korsh.) B. Schisk., Fl. U.R.S.S. 3 (1935) 5. — *C. latespicatus* Boeck. var. *setiformis* (Korsh.) Koyama, Act. Phytotax. Geobot. 16 (1955) 11; Quart. Journ. Taiwan Mus. 14 (1961) 182.

NEW GUINEA. Western Highlands, Sirunki, Lake Iviva, basin to west of inflow stream, sward of *Juncus* and *Cyperus* species, in wet organic mud, alt. c. 8400 ft, Aug. 28, 1962, Walker ANU 619 (L).

New for New Guinea. As was already pointed out by Ohwi, l.c., the differences between *Cyperus diaphanus* Schrad. ex R. & S. (= *C. latespicatus* Boeck.) and *C. setiformis*

Korsh. are slight. Therefore I am following Koyama, l.c., in reducing the latter to varietal rank.

**Cyperus lucidus** R. Br., Prod. (1810) 218; Boeck., Linnaea 36 (1870) 355 p.p. (excl. pl. brasil.); Benth., Fl. Austr. 7 (1878) 283; Kük., Pfl. R., Heft 101 (1936) 448. — *Mariscus lucidus* (R. Br.) C. B. Clarke, Kew Bull. add. ser. 8 (1908) 18; Domin, Bibl. Bot., Heft 85 (1915) 442.

NEW GUINEA. Territory of New Guinea: Western Highlands Dist., Wabag area, Upper Lai valley, Sirunke, near Lake Iviva, swamp, 8200 ft, Aug. 2, 1960, *Robbins* 3167 (CANB); same area, swamp beneath the village of Nanguris, tall reed swamp area within major swamp, flushed, 8400 ft, Aug. 14, 1962, *Walker* ANU 537 (CANB).

New for New Guinea; known from E. Australia from Tasmania to Queensland. According to Kükenthal, l.c., all the Australian specimens he examined except for *R. Brown* 5884, the type of *C. lucidus*, belong to var. *sanguineo-fuscus* (Nees) Kük., Pfl. R., Heft 101 (1936) 449 (*C. sanguineo-fuscus* Nees, Ann. Nat. Hist. 6, 1841, p. 46, based on *Gunn* 956 from Tasmania). The New Guinea specimens may belong to this variety, but I have not seen Brown's type mentioned above. Nees himself doubted whether his *C. sanguineo-fuscus* might be the same as *C. lucidus* R. Br. ('Hic verus esse videtur *Cyperus lucidus*, R. Br.').

**Carpha alpina** R. Br., Prod. (1810) 230.

NEW GUINEA. Territory of New Guinea: Morobe Dist., Mt Amungwiwa, S. of Wau, alpine grasslands, 11,400 ft, Nov. 3, 1963, *Womersley* NGF 17962 (L); Eastern Highland Dist., Mt Wilhelm, east slopes, alpine grasslands, 13,100 ft, June 15, 1959, *Brass* 29931 (US). — Papua: Southern Highlands Dist., western summit grasslands of Mt Giluwe, alpine grasslands, 12,300 ft, local name *era* (Mendi language), Aug. 14, 1961, *Schodde* 1827 (CANB, L); same locality, alpine grassland with bogs and tarns, very common in damp peaty situations, also a pioneer of shallow tarns, 11,500 ft, Sept. 23, 1961, *Pullen* 2890 (CANB).

**Machaerina articulata** (R. Br.) Koyama, Bot. Mag. Tokyo 69 (1956) 62. — *Cladium articulatum* R. Br., Prod. (1810) 237; Ohwi, Bot. Mag. Tokyo 56 (1942) 208.

NEW GUINEA. Territory of New Guinea: W. Highlands, Sirunke, swamp, *Phragmites* community in flushed area, the rhizome is eaten by the natives, Aug. 27, 1962, *Walker* ANU 611 (CANB, L); same locality, swamp between Nanguris and Kaiamanda, sward of sedges in 4 cms of water, rooting in coarse detritus mud, rhizome system luxuriant running through from 6 cm to 30 cm depth, alt. 8400 ft, Sept. 14, 1962, *Walker* ANU 679 (CANB, L).

For New Guinea previously only known from the Western part (Arfak Mts; see Ohwi, l.c.)

**Rhynchospora gracillima** Thwaites, En. Pl. Zeyl. (1864) 435; Kern, Blumea 8 (1955) 162; *ibid.* 10 (1960) 649.

NEW GUINEA. Territory of New Guinea: Sepik Dist., Wewak-Angoram area, Yambe-Maprik-Pagwi Road, in moist grassland, Sept. 7, 1959, *Robbins* 2366 (CANB).

**Oreobolus ambiguus** Kük. & Steen., Bull. Jard. Bot. Botzg III, 14 (1936) 48, f. 1.

NEW GUINEA. Territory of New Guinea: Morobe Dist., Mt Amungwiwa, S. of Wau, alpine meadows in boggy places, 11,400 ft, Nov. 1963, *Womersley* NGF 19011 (L).



**Scleria papuana** Kern, Blumea 11 (1961) 160, f. 3d, 4. — *S. motleyi* (non Clarke) S. T. Blake, J. Arn. Arb. 35 (1954) 225.

NEW GUINEA. Territory of New Guinea: Morobe Dist., ravine bordering the Leron River near the Markham Valley, moist shaded bank along creek, 250 ft, May 24, 1962, *Th. G. Hartley 10.230* (CANB). — W. New Guinea: Hollandia and vicinity, rain forest, tufted floor plant on sharp ridge-crest, 100 m, June-July 1938, *Brass 8870* (L).

**Scleria psilorrhiza** C. B. Clarke, Fl. Br. Ind. 6 (1894) 691; Kern, Blumea 11 (1961) 176.

NEW GUINEA. Papua: Baiawa, Moi Biri Bay, occasional in moist hollows in grasslands, 30 m, May 7—10, 1953, *Brass 22132a* (L).

New for New Guinea.

**Scleria scrobiculata** Nees ssp. *discocarpa* Kern, Blumea 11 (1961) 186, f. 6c.

NEW GUINEA. Territory of New Guinea: Sepik Dist., Wewak-Angoram area, But, W. of Wewak, old wartime airstrip in low beach swale, Aug. 1, 1959, *Robbins 2047* (CANB).

**Scleria annularis** Nees ex Steud., Syn. 2 (1855) 176.

NEW GUINEA. Papua: Baiawa, Moi Biri Bay, common on grassland ridges, 30 m, May 7—10, 1953, *Brass 22133* (L).

**Carex michauxiana** Boeck. var. *asiatica* (Hultén) Ohwi. — For the synonymy see Koyama, Journ. Fac. Sci. Univ. Tokyo III, 8 (1962) 235.

NEW GUINEA. Territory of New Guinea; Western Highlands Dist., Wabag area, Kandep valley 20 miles S. of Laiagam, swamp, 7500 ft, August 10, 1960, *Robbins 3234* (CANB). — Papua: Southern Highlands District, western slope of Mt Giluwe above Klareg, bog grasslands, alt. c. 8800 ft, local name *tudik* (Mendi language), *Schodde 1992* (CANB, L).

New for New Guinea. The typical variety of *Carex michauxiana* occurs in north-eastern N. America, var. *asiatica* was known from southern Kamtchatka, the Kuriles, Yezo, and Hondo.

The differences between the American plants and the Asiatic ones are but slight and it is questionable whether recognition of two geographical races is justified. In the few American specimens I could examine the male spikelet does not overtop the upper female ones (but this is less frequently also the case in Asiatic specimens), the leaves are slightly narrower, the female glumes 3-nerved (4—5-nerved in the Asiatic plants), and the utricles in general somewhat smaller. I fail to see the difference in the relative length of the glumes mentioned by Koyama, l.c. If the detailed description by Mackenzie, N. Am. Fl. 18 (1935) 427, refers to American plants only, the distinction of var. *asiatica* is hardly justified, as the Asiatic plants almost completely fall within the limits of variation there given.

It is worth noticing that most of the terminal spikelets in the New Guinea specimens are not strictly male, but bear some female flowers at the top.

The disjunct area of *Carex michauxiana* is one of the numerous examples of the relations existing between the flora of north-eastern N. America and that of East Asia. The occurrence in the mountains of New Guinea is the more remarkable as there are but few instances of species of mainly north-temperate distribution extending south of the equator.